An empirical investigation into the Europeanization of fiscal policy

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Abstract

We investigate the Europeanisation of fiscal policy in the eurozone. So doing we empirically test the impact of a series of pertinent variables on eurozone Member States' fiscal policies during the 1984-2006 period. In addition to a host of usual-suspects, we introduce two new measurements to capture a country's Stability Culture – the effect of which has been not been addressed by previous empirical work. We find evidence that government debt is primarily driven by the state of the domestic economy. Virtually no empirical support for the claim that institutional, political or ideational factors influence the variations in gross debt can be provided. Specifically, our results show that neither a population's inflation aversion nor policy-makers' pledge to 'sound' public finances translate into lower deficits.

Keywords: Fiscal policy, Europeanisation, Stability Culture, Economic and Monetary Union

Introduction

Europe's sovereign debt crisis has brought the discussion about the causes of government deficits back on the round table of political scientists and economists. The underlying purpose of the debate suggests more than an aspiration to trail current events. Instead the increased interest in public finances reflects broader questions related to some of the key intellectual issues in political science such as the interaction between the economic and the political sphere or the impact of ideational structures on policy outcomes. According to Schumpeter (1991: 101), 'public finances are one of the best starting points for an investigation of society, especially but not exclusively of its political life'. He argued that this is 'true both of the causal significance of fiscal policy (insofar as fiscal events are important elements in the causation of all change) and of the symptomatic significance (insofar as everything that happens has its fiscal reflections)' (*ibid.*).

This article is concerned with changes in government debt as it seeks to investigate the causes of a country's fiscal positioning. In particular, we account for various 'causations of change' exerted by economic, political as well as ideational factors and analyse the 'fiscal reflections' of EMU (Economic and Monetary Union) membership and its key fiscal framework, the Stability and Growth Pact (SGP). We thus join the debate on the determinants of fiscal outcomes and consider our contribution as complementary to the many antecedents who scrutinised budgetary policies. In so doing, we will empirically test the impact of a series of variables on the eurozone states' fiscal outcomes. Specifically, we seek to answer two related research questions: First, what is the impact of Europeanization processes on public finances? Second, what are the determinants for non-compliance with EMU's fiscal rules? Our findings suggest that the Europeanization pressures

exerted by the Maastricht Treaty and the SGP hardly affected public finances in EMU. What is more, we find strong evidence that government debt is primarily driven by the state of the domestic economy. We find virtually no empirical support for the claim that political and ideational factors, notably a country's Stability Culture, influence the change in debt or compliance with EMU's fiscal framework.

This article complements the existing literature in four ways: First, we offer two approaches of addressing the Europeanization of fiscal policy quantitatively, employing OLS and probit regression models. Second, we introduce two novel measurements to capture a country's Stability Culture, the effect of which has been not been addressed by previous empirical work. Thirdly, we account for both Maastricht and SGP pressures by constructing various Europeanization variables. And finally, our work is based on data ranging from 1984-2006, which allows us to include more years during which the SGP was in place. So doing, this article joins a growing body of research employing the Europeanization approach in combination with quantitative methods (e.g. Mastenbroek 2003) to overcome the conundrum of causality with which parts of the Europeanization literature are said to be marred. The remainder of this article proceeds as follows. First, we explore the concept of Europeanization and review related works on the Europeanization of fiscal policy. The subsequent section discusses our model specifications and data. The fourth section presents the empirical results and the final section concludes.

Europeanization and fiscal policy

According to Page (2003: 163), Europeanization is understood to be the impact the EU has on 'specific institutions and practices across a wide range of state activity'. Since the mid-1990s, a vast body of literature used this concept to explain European integration (e.g. Dyson 2007). We are interested in the impact EMU membership has on the fiscal policy of its states. The central European Union (EU)-level instrument constructed to bring about the Europeanization of fiscal policy is the SGP.[i] Since its creation in 1997, the Pact has been at the centre of EMU debates raising questions that go beyond monetary integration and enter the realm of national sovereignty, the role of EU institutions and its body of law. Its most important (and controversial) components are deficits and debt level limits (below 3 and 60 per cent of GDP respectively). Ultimately, the Pact aims at ensuring that the constraints placed on member states prior to the introduction of the euro (via the Maastricht convergence criteria) would persist once EMU was established. Thus, its purpose is to guarantee sound public finance and prevent free-riding on other members states' fiscal prudence.

Previous qualitative studies on the Europeanization of fiscal policy have predominantly focused on single-country cases (e.g. Kaarlejarvi 2009) and portrayed a diversified landscape of evidence. In a similar vein, empirical studies present ambiguous evidence about the determinants of fiscal prudence in EMU. Freitag and Sciarini (2001) have used results from a pooled time-series analysis based on 14 countries for the 1978-97 period and find little significant impact from the Maastricht Treaty. Hughes Hallett and Lewis (2008) use different indicators for the Maastricht phase (1992-97) and SGP phase (1998-2002) for the 15 countries that were members of the EU at the launch of the single currency. Their results tend to show that the new fiscal discipline was temporary (ceasing in 1997) and a likely due to a fear of being denied entry to monetary union. Annett (2006) analyses the

Europeanization effect on fiscal policy by using a sample of 14 EU countries for the 1980-2004 period. He compares the impact of various variables on the cyclically-adjusted primary balance for different sub-periods. Busemeyer (2004) uses a sample of 22 OECD countries spanning 1980 to 2000. This analysis does not distinguish between SGP and Maastricht pressures and shows that the SGP has disciplined national public finances. Hallerberg *et al.* (2007) use a sample covering the years 1985-2004 of the EU 15 member states. They control for Europeanization by introducing a convergence indicator for the years 1992-97 that is based on the distance to the reference value for the deficit-to-GDP ratio of three per cent. This indicator is found to have no significant impact across their different specifications.

Whilst all of these studies make important claims about the impact of the Europeanization pressures exerted by EMU membership on fiscal policy controlling for various economic, political and institutional variables, they tend to underplay the role of public opinion and policy-makers ideational outlook in their analyses. Apart from the inclusion of binary and arguably simplistic variables (such as the distinction between left and right wing governments), no empirical work, to our knowledge, has unravelled the impact of EMU-specific ideational variables on the Europeanization of fiscal policy. Our article seeks to contribute to the exploration of this empirical blind spot.

Ideational structures shape and legitimize political decisions. The ideational grounding of salient economic issues is hence thought to be an important component of the domestic as well as the EU-wide political environment which impact on macroeconomic policy-making. In the past decade, the development of ideational approaches has provided inroads into studying Europeanization

processes and pressures. Analysing the bumpy road to Maastricht and the eventual creation of the SGP, several qualitative studies have stressed the importance of the ideas that informed the roadmap towards EMU and looked at the interplay between ideology and European integration (e.g. McNamara 1998). Social Constructivist accounts of the creation and implementation of EMU are united by a shared focus on paradigms and norms that is the fundamental principles which are maintained over a long period and which are consistent with the *Weltanschauung* of their holders. In the case of EMU, the crucial paradigm in question is the so-called stability paradigm, which is in turn linked to the notion of Stability Culture as the central 'frame' (Knill and Lehmkuhl 1999) for the Europeanization of fiscal policy.

Drawing on this small but well-informed literature (especially Dyson 2000), we understand the term Stability Culture as a common economic policy perspective shared by policy-makers and the population at large whose primary concern is the maintaining of low deficits and low inflation. Hayo (1998) claims that the design of the ECB is merely one part of a stability regime that has to be boosted with public attitudes. Public opinion is thus said to become a 'significant precondition' (*ibid.* 244) for achieving a low inflation rate and low deficits. Häder and Niebaum (1997: 95) even go so far as to state that 'Stability Culture is the most precious element of a stable currency' making this ideational ingredient a key lever of success or failure for the Europeanization of fiscal policy. The German Chancellor Angela Merkel (2010) recently espoused this claim amidst the turmoil the sovereign debt crisis when she promised to 'make sure together with our partners that the whole of Europe commits herself to a new Stability Culture'. Although references about EMU's Stability Culture are a recurring feature of academic literature and political discourse alike, we still lack a deeper understanding of how the anchorage of Stability Culture impacts on the Europeanization of fiscal policy. Put differently, does a nation's Stability Culture influence compliance with EMU's

fiscal rules as suggested by Merkel? And more broadly, what is the impact of this particular economic paradigm on fiscal policy outcomes? By including two proxies for Stability Culture, one policy-maker one population centred, we account for the relationship between macroeconomic developments and ideological variables as Frieden and Jones (1998: 163-87) called for.

Quantifying the Europeanization of fiscal policy

Despite being highly innovative and having yielded relevant insight, Europeanization research is said to suffer from vagueness of causality (Exadaktylos and Radaelli 2009). What constitutes dependent and independent variables is often poorly defined and how to measure Europeanization is not always adequately addressed. While it might be less feasible to apply the strict logic of statistics to other domains of European integration, the use of its principles is unambiguous when it comes to fiscal policy.[ii] The yardstick for public finance in the eurozone as expressed in Art. 126 of the *Treaty on the Functioning of the European Union*, gives explicitly numeric objectives based on which a compliance dummy can be created. What is more, the Europeanization pressures thought to be exerted by the Maastricht Treaty and subsequently the SGP are straightforward to locate in time and hence to transform into year-based dummy variables. This approach to Europeanization enables us to answer two related research questions: First, what is the impact of Europeanization pressures on public finances? Secondly, what are the determinants for non-compliance with EMU's fiscal rules?

This analysis incorporates previous work undertaken by Hallerberg *et al.* (2007), which itself is based on the seminal work of Roubini and Sachs (1989). Our dataset is an extended version of the one found in Darby and Melitz (2008). It covers the 1984-2006 periods for ten founding member states of EMU.[iii] We start our analysis in 1984 following the famous 'U-turn' in French economic policy in 1983, in which the government moved away from Keynesian expansion toward austerity and deregulation. To avoid capturing any extraordinary effects due to the past financial and economic crisis, which might bias our results, the time span of this analysis ends in 2006 and the impact of the recent economic and political turmoil is thus not considered. Political variables are taken from Armingeon *et al.* (2008). The linear specification used is as follows:

$$\Delta debt_{i,t} = \beta_0 + \beta_1 \Delta debt_{i,t-1} + \beta_2 X_{i,t} + \beta_3 S_{i,t} + \beta_4 P_{i,t} + \beta_5 E_{i,t} + \beta_6 I_{i,t} + \varepsilon_{i,t}$$

The dependent variable is the change in general government gross public debt as a share of GDP for country i at time t, t = (1, …, T). One main reason for the use of this variable (as opposed to central government debt or the central government deficit) is that it renders the results comparable to previous studies in the literature. What is more, it is the most relevant variable within the European fiscal framework under the aegis of the SGP. The regressors include an autoregressive process. The lagged change in the debt level is added to reflect the fiscal starting point of a government by taking into account its legacy debt. Other macroeconomic variables are included in matrix X = {lagged debt level, real GDP growth, change in unemployment rate, debt servicing costs}. The next two variables will impact on government debt through automatic stabilisers and discretionary measures aiming at economic stabilisation. The impact of interest payments on governments is captured via the 'debt servicing costs' variable. Table A1 in the Appendix gives a full description of all variables.

Matrix S = {population, openness, output volatility} comprises variables describing structural characteristics that may affect the budgetary performance. 'Population' can have both economic and political implications pertinent to debt levels. A larger country could benefit from economies of scale in the production of public services. Population would thus be negatively correlated to spending and deficit levels. Alternatively, the bigger the country the more political weight it has in international negotiations. Consequently, it may face fewer problems breaching the Pact. The variable 'openness' is included as a measure of the national economy's exposure to external competition.[iv] Finally, 'output volatility' is positively linked with the demand for fiscal insurance. There should be no deficit bias over a given cycle since insurance is designed to be provided by the automatic stabilization of disposable income. However, a deficit bias may arise if the policy reaction to economic fluctuations is asymmetric.

The matrix P comprises six political controls, P = {election year, right, centre, single majority, minority, gov_gap}. 'Election year' is a dummy taking value one if (at least) one election of the national parliament (lower house) took place during the year and zero otherwise. The political processes surrounding public finance have been elucidated by the political economy of public deficits. One of the central hypotheses of this approach revolves around the electoral business cycle based on the premise that policy-makers are opportunistic and voters myopic. Consequently the production of public policy is such as to secure re-election operating on a short time-horizon. Assuming that the expected support for a party will rise with the welfare it promises to deliver, deficits are higher in election years when incumbent governments try to buy electoral support (Nordhaus 1975).

'Right' and 'centre' account for the distribution of power among right wing, centre and left wing parties, utilising the percentage of total cabinet posts filled, weighted by days. The analysis of the impact of political parties and their ideological inclinations has been the target of considerable scrutiny since the early 1970s. Proponents of the left-right hypothesis of public deficit argue for a causal relation between political variables and policy outputs (Hibbs 1977). 'Single majority' and 'minority' account for the type of government in power: 'single majority' is a dummy taking value one if a single party is governing with a majority and zero otherwise. 'Minority' takes value one if a single party minority, or multiparty minority, or caretaker government is in place and zero otherwise. In their seminal work on political determinants on budget deficits, Roubini and Sachs (1989) have argued that 'weaker governments', where weakness is indicated by the presence of many political parties in the ruling coalition, are prone to run larger deficits. Policy-makers are equipped with ideological outlooks, which shape their stances on fiscal policy. The argument then suggests that such differences, and the potentially irreconcilable policy preferences, result in larger deficits due to ill-designed compromises. Finally, we include the variable 'gov_gap' measuring the ideological gap between the new cabinet and the old one, calculated as the difference of the index value of the outgoing and the incoming government (cf. Table A1). According to the intuition described above we would expect a swing towards a left cabinet to bring an increase in spending and a reduction for a swing towards the right.

Matrix E= {SGP, Maastricht, SGP_Maastricht} contains three Europeanization variables.[v] 'SGP' is a dummy which takes value one if the country is a member of the eurozone and zero otherwise. This applies for the subset of years 1998 to 2006. In order to enrich our analysis we have incorporated a Maastricht effect: a dummy which takes value one for the year 1992-97 and zero otherwise for the same countries.[vi] It aims at capturing the process of fiscal consolidation between

1992 and 1997 in the run up to EMU. This variable measures the Europeanization effects prior to the creation of the SGP. Another variable was alternatively used in our analysis: 'SGP_Maastricht' which is the sum of both 'SGP' and 'Maastricht'. We accounted for the Europeanization of fiscal policy by running regressions with 'SGP' and alternatively with 'SGP_Maastricht' and both with 'SGP' and 'Maastricht' separately.

Matrix I = {inflation aversion, economic orthodoxy} comprises variables pertaining to the anchorage of Stability Culture within policy-makers and the population. It seeks to account for the ideational outlook of policy-makers and the population at large that is widely attributed to impact on the Europeanization of fiscal policy, beyond the inclusion of the political controls.[vii] First, the variable 'inflation aversion', which is indicated by the percentage of respondents naming the fight against inflation as one of the two most important priorities, is taken as a proxy for the ideational grounding of the stability paradigm in the broader population.[viii] Similar approaches to measuring inflation aversion, – which use survey questions specifically about inflation without making explicit reference to other economic policy objectives which might be in conflict with achieving inflation – can be found in Ehrmann and Tzamourani (2009), Hayo (1998), and Farvaque and Mihailov (2009).

The *Eurobarometer* data on which 'inflation aversion' is based, is discontinuous: the first wave of collection covered the 1984-93 and the second 2003-06 period. Moreover, the availability of data varies from country to country and the questionnaire used in this survey changed during the time span of the analysis.[ix] In addition, there are pitfalls in interpreting attitudinal surveys more generally. Notably, there is the question of comparability, which queries the extent to which one

country result can be seen on a par with another. In order to minimise this problems, we run our regressions by replacing ‘inflation aversion’ with its standardised country-wise version and alternatively by weighting it by its corresponding yearly inflation value. To further hone our proxy we also construct a measure of ‘inflation aversion’ with the residuals from a regression of inflation worry on actual inflation (with different number of lags) and the contemporaneous value of the mean inflation of EMU countries in order to control for neighbouring countries effect. Instrumenting this way, we seek to capture ‘inflation aversion’ purged from 'economic noises'. In addition we compute the residuals incorporating a measure of the Central Bank Independence (CBI) taken from Cukierman *et al.* (1992) which aims at controlling for people’s perception of the credibility of their institutions in maintaining low levels of inflation. Thoroughly controlling for the two most often-cited factors driving inflation aversion (actual inflation and CBI), allows us to treat the answers to this *Eurobarometer* question as a proxy for popular inflation aversion.

The second ideational variable is ‘economic orthodoxy’. Whilst the first proxy measured the anchorage of Stability Culture in the population at large, this measurement accounts for the ideational commitment to Stability Culture of the government.[x] It is based on the *Comparative Manifesto Project* (CMP) produced by Klingemann *et al.* (2006) which counts mentions in party manifestos that relate positively (or negatively) to particular policies. Specifically, we take the measurement for ‘economic orthodoxy’ as an indicator for the government’s ideational outlook. This variable represents the percentage of sentences (with respect to the overall number of sentences) in the parties’ election programs which comprised of positive statements with respect to reduction of budget deficits, retrenchment in crisis, thrift and savings in the face of economic hardship, support for traditional economic institutions such as stock market and banking system and support for strong currency, – all of which are key ingredients for a strong Stability Culture. If there

is more than one party in a coalition government, the government's index value is an average of the separate index values of all coalition partners, weighted by their seats in parliament.[xi]

Empirical results

In this section we present the results of our empirical estimation, for a discussion on econometrical issues and estimation techniques see Appendix 1. Table 1 displays the results of our investigation into the determinants of public debt for our sample from four different specifications.[xii] The first column shows the estimates for the baseline model which includes only the macroeconomic variables and the three structural characteristics. This model has a strong explanatory power, as can be seen with the high Wald statistics, and explains 67 per cent of the variations in the dependent variable. Jointly, all macroeconomic variables are significant and, with the exception of the change in unemployment rate, they are all individually significant.[xiii] Indeed, these macroeconomic variables account for most of the explanatory power (if the structural characteristics of this baseline specification are taken out, an R-square of 0.65 is obtained). The lag change in general government gross public debt as share of GDP (in per cent) has a positive impact underlining the presence of an auto-regressive process.[xiv] A high change in debt to GDP ratio in the past is likely to impact positively on the contemporaneous variation of debt. However, the lagged debt level has a smaller negative coefficient. This suggests that countries raise their budget balances in reaction to past fiscal deficits. Hallerberg *et al.* (2007) explain this phenomenon by arguing that in theory member states tend to respect their inter-temporal budget constraints. The variable real GDP growth has a strong negative impact. Surprisingly, yearly variations in unemployment produce no significant rise in public debt.

Table 1. The impacts of different sets of control variables on public debt (Δdebt)

	coeff.		se	coeff.		se	coeff.		se	coeff.		se
$\Delta debt_{t-1}$	0.10	*	0.06	0.09	*	0.06	0.14	**	0.06	0.12	**	0.06
$Debt_{t-1}$ (level)	-0.04	***	0.01	-0.05	***	0.01	-0.02		0.01	-0.02	**	0.01
real GDP growth in %	-0.40	***	0.15	-0.26	*	0.16	-0.20		0.25	-0.15		0.23
Δunemployment rate	0.29		0.27	0.25		0.27	1.07	***	0.37	0.91	***	0.34
debt service costs	1.01	***	0.17	1.17	***	0.18	0.89	***	0.23	0.85	***	0.22
openness	-0.01		0.01	-0.01		0.01	-0.01		0.01	-0.01	*	0.01
population	0.01		0.01	0.01		0.01	0.01		0.01	0.00		0.01
output volatility	0.68	***	0.26	0.79	***	0.26	0.00		0.52	0.26		0.46
SGP				0.69		0.65	0.14		0.78	-0.57		0.84
election year				0.21		0.37				-0.01		0.51
Right				0.00		0.01				-0.01		0.01
Centre				0.01		0.01				-0.02		0.01
single majority				1.02		0.92				-0.63		1.11
Minority				-0.71		0.53				-2.33	***	0.87
gov_gap				-0.09		0.26				0.24		0.29
Inflation aversion							0.39		0.33	0.42		0.31
Economic orthodoxy							0.04		0.06	0.05		0.05
Constant term	3.01	***	0.74	2.09	***	0.73	1.62		1.30	3.92	**	1.71
Nobs	209			209			102			102		
R2	0.67			0.68			0.65			0.68		
Wald Statistic	323	***		359	***		171	***		239	***	

Standard errors are corrected for groupwise heteroscedasticity and contemporaneous correlation across countries of the error terms with panel-corrected standard errors.

* Significant at the 10 % level; ** at the 5 % level; *** at the 1% level.

The strong significance of macroeconomic variables should come as no surprise since many major areas of public spending such as unemployment compensation, social welfare expenditure, early retirement benefits, job retraining, and subsidies for ailing firms are inherently counter-cyclical. Thus, fiscal policy-making is likely to follow a pattern of economic path-dependency. During times of sluggish economic growth, it becomes more politically costly for politicians to follow the policy prescriptions of EMU's stability credo. In theory, EMU member states are expected to cut deficits in the good times and to increase their margin of manoeuvre in bad times. Yet, the Pact has no real 'stick' to enforce such cyclical behaviour (for a discussion on hard vs. soft law see Begg and

Schelkle 2004). Hence, this asymmetric design adds to the negative effect of bad economic conditions. This relationship is hardly unique to EMU. However, the fundamentally different degrees of Europeanization between monetary and fiscal policy reinforce this pattern as the introduction of one monetary policy controlled by the ECB renders fiscal policy both economically and politically more important as a policy instrument.

Apart from output volatility, the structural characteristics are not individually significant. Despite the fact that all three are jointly significant (p-value of 0.02), as mentioned above, these factors only make a marginal contribution to the explanatory power of the model. Interestingly, the population of a country does not affect variations in the debt level. This finding does not support previous studies which argue that larger member states face greater difficulties in meeting the Pact's provisions be it due to the fact that the cost of fiscal consolidation tends to be larger in bigger countries and that smaller countries pay a lower price for good fiscal reputation (Laurent and Le Cacheux 2004) or that larger member states are less effected by peer pressure and damages to their political reputation due to a larger political clout (de Haan *et al.* 2003).

The second column displays the specification after the six political variables have been added. With this addition, the overall explanatory power of the model increases marginally (around 1 per cent). In brief, this set of variables does not bring much additional explanatory power to the baseline specification. Firstly, there is no evidence for an electoral cycle. Contrary to Mink and de Haan (2006), we find no evidence for expansionary fiscal policies during election years. Secondly, an increase in the weight of centrist or right wing parties' power does not seem to have any significant impact on the change in debt, results consistent with *inter alia* Pampel and Williamson (1988).

Thirdly, there is no significant impact from the set of variables describing the type of government in power; single majority or minority. In addition, if these variables are crossed with the variable 'election year', no evidence can be found that coalition governments would be likely to find it more difficult to agree on a fiscal sobriety during election years. Moreover, in contrast to Busemeyer (2004), no significant impact from the single majority variable at times of election can be found. Finally, the ideological gap between new cabinet and the old one has also no significant impact. All the political variables are jointly not significant (p-value of 0.2). In addition, the Europeanization (SGP) and political variables show a similar result (p-value of 0.25) if tested jointly. For the countries and time-span analysed, no evidence of a significant impact of the political make up of government vis-à-vis fiscal performance was found. In sum, variations in government debt appear not to be caused by partisanship, electoral cycles, or government composition once controlled for the macroeconomic variables.

Having controlled for the macroeconomic and political climate, what is the impact on the Europeanization variables on public finances? The empirical results displayed in the last three columns in Table 1 show evidence that the ‘SGP’ variable did not have a significant impact on the fiscal positioning of eurozone member states. The results hold when using the variable ‘SGP_Maastricht’ or the combination of ‘SGP’ and ‘Maastricht’. Moreover, if the different specifications of Table 1 are used with a different sample, including three non member states as ‘control group’ (Denmark, United Kingdom and Sweden), the results obtained still show that 'SGP' or ‘SGP_Maastricht’ or the combination of ‘SGP’ and ‘Maastricht’ have no significant impact.[xv] Apart for Austria, Germany and France, tests of differences in means for our dependent variable for the EMU member states show that all other countries have experienced a negative mean post-1998 compared to a positive mean pre-1998. This reveals a significant change of pattern in the yearly

change in general government gross public debt as a share of GDP. Despite this reversal, our results suggest that the Europeanization variables seem not to play a significant role in shaping debt variations once the impact of macroeconomic variables is taken into account. What is more, tales of shrinking deficits have to be taken with a pinch of salt. Both the quality of the consolidation and the accuracy of the accounting practices of several member states have been brought into question (e.g. von Hagen *et al.* 2002). It is well established that political ownership of the SGP was waning during the first decade of EMU. The fiscal transgressions of Germany and France have resulted in a de facto suspension of the excessive deficit procedure leaving 'naming and shaming' as the only punishment for fiscally wayward states. The 2005 reform sought to boost Member States' political ownership of the SGP. And indeed the 2005 to 2007 period saw budgetary improvements throughout the eurozone. Yet this was hardly the result of Europeanization pressures exerted by the Pact, but of a comparatively sunny economic outlook during 'wasted good times' (Schuknecht 2009). During the Great Recession we witnessed a Member States-driven exegesis of fiscal rules and a loose reading of the exceptionality provisions of the SGP with largely uncoordinated stimulus programmes to mitigate the economic fallout (Cameron 2012). As the eurozone was faced with the most severe recession of its young history, fiscal rules fell (naturally) to the wayside.

If EMU's rules did not impact on national fiscal policy choices, neither in times of economic growth nor in times of recession, can a shared fiscal policy paradigm function as a substitute for binding institutional commitment? Our findings suggest that the answer is no. The last two columns of Table 1 display the results for the two variables measuring a country's Stability Culture. First, the standardized ideational measure of inflation aversion is not significant in explaining the change in debt. When we use the weighted measure of inflation aversion by actual inflation, the raw data from *Eurobarometer* or the residuals from a regression purged from 'economic noises', the results

are similar. Furthermore, the results obtained with one or many additional time lags of our various versions of 'inflation aversion', reflecting a more medium to long-term impact on the dependent variable, show similar results. Secondly, the ideational variable 'economic orthodoxy' is also not significant in explaining the change in debt. Wessels and Linsenmann (2002: 68) suggest that eurozone member states will comply with the SGP 'not only because of the threat of sanctions but mainly because the "sound finances and money" paradigm has entered the economic beliefs of national policy-makers as a "collective identity"'. Yet our findings show that, all other things being equal, the state of Stability Culture, both within the population at large as well as policy-makers in power, has no significant effect on the fiscal positioning of EMU member states and consequently on compliance with the SGP.

One may hypothesize that in times of economic 'good weather' the pressure to europeanize fiscal policy may be less compelling. In order to investigate if that is the case we subdivide our sample of 209 observations in two; one subsample for which we observe only positive values of real GDP annual growth in % (196 observations) and for negative values (13 observations). The smaller sample of 102 observations, if we include our variables for Stability Culture, leaves us with two subsamples of 93 and 9 observations (for positive and negative values respectively). Most of our sample covers 'good weather' years. The large disproportion of positive annual growth observations in our sample means that we have too few observations to estimate our models for negative growth years and that our results for the positive growth subsample is very similar to the one we already display.[xvi]

We complement the results from our multivariate analysis by looking at the pairwise correlation between each of our controls and the change in government debt. We find that 'economic orthodoxy' and four out of five of our 'inflation aversion' measures are not significantly correlated pairwise with the change in government debt at a 10% significance level. Furthermore, all six political controls have non-significant pairwise correlations with government debt. Out of the three variables we use for measuring SGP effect, only one (SGP) has a significant correlation with government debt. These results tend to indicate that, not controlling for macroeconomic variables, these variables are on the whole not significantly correlated with our dependent variable. It is interesting to note that alongside these results the pairwise correlations of most macroeconomic variables with government debt are significant.

We now turn to the second part of our empirical investigation where we look at the determinants for non-compliance with EMU's fiscal rules. For that purpose we use a probit model with a dummy for non-compliance as the dependent variable. This dummy takes value one if the variable 'Δdebt' (Δ in general government gross public debt as share of GDP in per cent) is larger than three per cent and zero otherwise. The table results for the probit estimation are not shown here, due to space constraints, but can be obtained from the authors upon request. Broadly they depict a similar picture as our preceding pooled cross-section analysis. For the countries and time-span analysed, no evidence of a significant impact of the political make-up of government vis-à-vis fiscal compliance was found. Our measure of Europeanization, 'SGP' (or alternatively 'SGP_Maastricht' or the combination of 'SGP' and 'Maastricht') has no significant impact either. Similarly, our measure of Stability Culture 'inflation aversion' is not significant in explaining the breach in fiscal rules. However, the results for 'economic orthodoxy' are ambiguous. In few specifications strong orthodoxy reduces significantly the likelihood of non-compliance. Yet, the marginal impacts on the

goodness of fit (pseudo-R2) of both ‘inflation worry’ and ‘economic orthodoxy’ taken together are very small at around 1 per cent. In other words, these variables do have a very little explanatory power, which suggests that the state of Stability Culture has virtually no impact on compliance with the SGP.

Conclusion

We find strong evidence that the change in government debt is primarily driven by the state of the domestic economy. In contrast to other studies, we detect no consistent empirical support for the claim that political or ideational factors influence compliance with EMU’s fiscal rules. Furthermore, the influence of Europeanization processes on public finance is called into question; being a member of the eurozone does not significantly impact on a country’s fiscal performance. Notably, the anchorage of a eurozone member state’s Stability Culture, both within policy-makers and the population at large, does not influence the change in government debt.

Our analysis shows that ideational factors have no significant role in shaping the Europeanization of fiscal policy once we control for macroeconomic variables. Yet, we do not wish to suggest that EMU suffers from an absence of ideas. Ideas do matter. Arguably, vocal adherence to the SGP and its stability paradigm can play an important role as part of policy-makers’ strategies to justify their actions. But, in economically difficult times, the desire to affirm fiscal prudence is increasingly compromised by fiscal realities.

Against this backdrop, our estimates cast doubt on the prospects of the reformed SGP (under the so-called Six Pack). There is little reason to assume that SGP III will exert more substantial Europeanization pressures. The current experience of the SGP's Excessive Deficit Procedure (EDP) shows that member states are cautious not to escalate the procedure and avoid moving it up to the newly introduced reversed majority voting (Hodson 2013). Since (re-)opening a wave of EPDs in 2008/2009, the already delayed deadlines for correction the excessive deficit have been further set and revised copiously, which involves commending EDP countries for having 'complied' with Article 126(7) recommendations. The corollary of this practise may well be that 'peer pressure' erodes further as member states congratulate themselves on actions taken. Individual countries' austerity politics are consequently not the result of pressure exerted by EMU's fiscal rules, but can rather be attributed to the conditionality of financial assistance with notable differences between debtor and creditor countries' consolidation efforts.

The clarion calls for a new Stability Culture in Europe appear to be nothing more than the strategic adoption of a common rhetoric. Our results show that neither a population's inflation aversion nor policy-makers' pledge to 'sound' public finances translate into lower deficits. Offering cultural repentance as a remedy to the eurozone's current woes by promoting 'German Stability Culture [as] a common good of all the participating states' (Merkel 2012) is presumptuous. In fact, our data show that on average Germany has a lower mean for inflation aversion (*Eurobarometer* raw data) than Italy, Portugal and Spain. What is more, in the context of post-crisis EMU, that is post financial sector bailout, attributing soaring debt and deficit levels to cultural recklessness is politically dishonest. Ultimately the Europeanization of fiscal policy will need to rely on more than weak rules and the myth of German cultural superiority.

APPENDIX 1: Econometric Issues

The existence of several binary dummy variables of interest renders the use of a common panel data estimator, with fixed or random effects to capture the cross-sectional heterogeneity, impossible. Moreover, the model employed includes institutional and political variables that tend to be constant, or not varying considerably over time. Therefore, a pooled cross-section analysis is necessary and will be based on the conventional estimation technique of ordinary least squares (OLS).

A preliminary test indicates that the estimates suffer from heteroskedasticity, which does not come as a surprise. The standard errors are corrected for group-wise heteroscedasticity and contemporaneous correlation across countries of the errors with panel-corrected standard errors.[xvii] Contemporaneous macro-variables are interlinked. Output growth, the unemployment rate, and the interest rate may be affected by contemporaneous fiscal shocks. This may create biases and raises additional doubts about the validity of the estimates.

To deal with this potential problem we use the instrumental variables estimation technique. The macroeconomic variables are instrumented with the lag of these five variables: real GDP growth, output gap (defined as the difference between potential GDP and actual GDP), long term interest rates, changes in unemployment rates and US long-term interest rates. These instruments are individually significant in the first stage; however, this does not in itself guarantee a successful identification in the second stage estimation. Hence, we use the Kleibergen-Paap rk F-statistic, a correspondingly robust version of the Cragg-Donald statistics to test for weak instruments. The

combination of the five lagged variables listed above is selected since it provides the highest statistics (7.96 obtained for the baseline model). This value is between the Stock-Yogo weak ID test critical values for a 5 per cent and 10 per cent maximal IV relative bias. Despite the fact that the statistic is not particularly strong, we can consider that weak instruments are not a serious problem in our case. Furthermore, the Hansen J statistics suggest that the instruments are not correlated with the error term at a 10 per cent level. The Kleibergen-Paap rk LM-statistics for overall identification allows us to strongly reject the null hypothesis that the equation is under-identified.

In sum, the results suggest the model used is reliable. We then proceed to compare the estimates, with and without instrumentation, in order to check if the macroeconomic variables suffer from endogeneity or not. In order to do this, we use the results obtained from the two-stage least squares using the STATA command ivreg2 with clusters (Baum *et al.*, 2007). The results of the implemented test, defined as the difference of two Sargan-Hansen statistics, suggest that we cannot reject the null that the specified endogenous regressors can actually be treated as exogenous with a p-value of 0.33. It can also be argued that the Europeanization variable 'SGP' may be considered endogenous. For instrumenting this variable we use the debt level in 1997. This variable reflects the need for adequate fiscal measures and initiatives to meet the goals set in the SGP in the years to follow. The test shows that this variable can also be treated as exogenous. Consequently, we use only non-instrumented estimates for carrying out the inference. The results not shown from 2SLS can be obtained from the authors.

APPENDIX 2: Variable Definition and data source

Table A1. Variable Definitions and Data Source

Δdebt	Δ in general government gross public debt as share of GDP in %
Real GDP growth in %	real GDP annual growth in %
Δunemployment rate	Δ in unemployment rate in %
Debt service costs	$= ((r_t-y_t)/100)D_t$ where r = real long-term interest rates; y = real GDP growth; D=debt/GDP ratio.
Openness	exports and imports as share of GDP in %
Population	in millions
Output volatility	standard deviation of real GDP growth over the past five years (t−5 to t−1)
SGP	dummy which takes value one if the country is a member of EMU and zero otherwise and this for the subset of years 1998 to 2006
Maastricht	dummy which takes value one if the country is a member of EMU and zero otherwise and this for the subset of years 1992 to 1997; for Austria and Finland the dummy takes value one for the years 1995 to 1997. For the three states that did not join the EMU (which are used only for our robustness checks), Maastricht takes value one for UK and Denmark over the years 1992-1997 and 1995-1997 for Sweden.
Election year	equals 1 if (at least one) election of the national parliament (lower house) took place during the year; =0 otherwise
Right	equals right wing parties in percentage of total cabinet posts, weighted by days
Centre	equals centre parties in percentage of total cabinet posts, weighted by days
Single majority	equals 1 if single party majority; = 0 otherwise
Minority	equals 1 if single party minority or multiparty minority or caretaker govt; =0 otherwise
Gov_gap	'ideological gap' between new cabinet and old one, calculated as the difference of the index value (govparty) of the outgoing and the incoming government. Govparty is defined according to Cabinet composition, Schmidt (1992): (1) hegemony of right-wing (and centre) parties (left = 0); (2) dominance of right-wing (and centre) parties (left < 33.3); (3) balance of power between left and right (33.3 < left < 66.6); (4) dominance of social-democratic and other left parties (left > 66.6); (5) hegemony of social-democratic and other left parties (left = 100); where left = left-wing parties in percentage of total cabinet posts, weighted by days.
Inflation aversion	Percentage of respondents who named inflation as one answer to the questions: 1) There is a lot of talk these days about what (our country's) goals should be for the next ten or fifteen years. On this card are listed some of the goals that different people say should be given top priority. Would you please say which one of them you yourself consider to be most important in the long-run? And what would be your second choice? (*Eurobarometer* 1984-1993) and 'What do you think are the two most important issues facing (our country) at the moment?' (*Eurobarometer* 2003-2006).
Economic orthodoxy	Percentage of sentences (with respect to the overall number of sentences) in the parties' election programs which comprised of positive statements with respect to reduction of budget deficits, retrenchment in crisis, thrift and savings in the face of economic hardship, support for traditional economic institutions such as stock market and banking system and support for strong currency, – all of which are key ingredients for Stability Culture. If there is more than one party in a coalition government, the government's index value is an average of the separate index values of all coalition partners, weighted by their seats in parliament. *Budge et al. (2001) and Klingemann et al. (2006)*

Source: Eurobarometer, OECD, Armingeon et al. (2008), Budge et al. (2001) and Klingemann et al. (2006)

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[i] In addition to the SGP, a complex set of other economic coordination processes under the Open Method of Coordination (OMC, Hodson and Maher 2001) has sought to provide a framework for the conduct of economic policies which may touch upon fiscal policies.

[ii] We are working with an arguably narrow understanding of the Europeanization of *fiscal policy.* Our focus of investigation lies with the state of public finances as measured by the change in government debt. In other words, we are not discussing issues pertaining to *economic governance* such as tax harmonization, fiscal transfers, Eurobonds or a common fiscal policy.

[iii] Austria, Belgium, Italy, Ireland, the Netherlands, Finland, France, Germany, Portugal and Spain; Luxembourg as well as Greece (although not a member of the very first wave) are excluded due to a lack of data for some variables.

[iv] Smaller countries are more open as the correlation between 'population' and 'openness' shows with a value of -0.58.

[v] We are not addressing the impact of national fiscal governance. For an analysis of domestic institutions/fiscal rules see Hallerberg *et al.* (2007). What is more, we are not denying the two-way causality of European integration that has been elucidated by the dichotomy between bottom-up and top-down processes (Börzel 1999), nor are we denying that other Europeanization process (e.g. under the OMC) may impact on public finances. For analytical purposes our study adopts a top-down approach of Europeanization, even though these two processes are in reality interwoven in a highly complex manner. Concretely, it has been well-documented that member states' ideas, interests and ideologies have shaped the rules of EMU (Hoekstra *et al.* 2008). We control for national specific conditions by clustering for countries. We would hence not assume any bias for the variables of our 'Europeanization matrix'.

[vi] For Austria and Finland the dummy takes value one for the years 1995-97.

[vii] These are *proxies* for Stability Culture. As Guiso *et al.* (2006: 26) put it 'a necessary first step is to define culture in a sufficiently narrow way, so that it becomes easier to identify a causal link from culture to economic outcomes'.

[viii] We are aware of proxying popular Stability Culture on the basis of one of its two components. Lack of data for measuring 'deficit aversion' prevented us from sizing its fiscal component. However, working solely with 'inflation aversion' should not present a problem as the two components go hand in hand and are likely to be highly correlated. It is by now established that the link between deficits and inflation is tentative at best and does not apply to low-inflation advanced economies (Catao and Terrones 2005). Yet, the economic accuracy of the alleged transition mechanism deficit-inflation is almost irrelevant in this context. At the heart of the construction of the pan-European Stability Culture was the claim that high deficits would cause inflation (EMI 1996), an assertion that was repeated with the reformed SGP (Gonzalez-Paramo 2005) and in the aftermath of the financial and economic crisis (Stark 2010). The fact that the monetisation of public debt is no longer an option in EMU does not appear to have changed policy-maker and central banker's rhetoric.

[ix] For a full description of the two *Eurobarometer* questions for the periods 1984-93 and 2003-06 see the Appendix. If we take only either one of the two waves of data for our estimations (thus having one constant question) the results still hold.

[x] Interestingly, the correlations between 'economic orthodoxy' with 'left', 'right' and 'centre', which account for the distribution of power (see matrix P of variables above), are -0.2, -0.03 and 0.26 respectively.

[xi] Of all the relevant variables available in the Manifesto Data Set one additional variable could be considered a potential proxy. 'Keynesian Demand Management' shows the percentage of sentences

(with respect to the overall number of sentences) in the parties' election programs which comprised of 'Demand-oriented economic policy; economic policy devoted to the reduction of depressions and/or to increase private demand through increasing public demand and/or through increasing social expenditures'. However, for most countries it stays almost constant for the entire period of analysis (1984-2006). Six countries out of ten in our dataset have six or less non-zero observations for the entire series of 22 observations (the other values being zeros). Such an invariant proxy is bound to yield non-reliable results. For that reason this variable is left out of the analysis.

[xii] The structure of the panel dataset is unbalanced as several years of data for Spain (1984-89) and Portugal (1984-94) are missing.

[xiii] All tests carried out in the section are done at the 10 per cent significance level.

[xiv] We also ran a simple AR(1) process which displays an R-square of 0.28. This shows that the additional macroeconomic variables we use have a significant scope in explaining our dependent variable. All additional analyses, alternative model specifications and estimates mentioned in this article are available from the authors on request.

[xv] As a robustness check we also used and alternative variable to 'Maastricht' inspired by Hallerberg *et al.* (2007) which is a measure of the lagged fiscal convergence (deficit to GDP ratio – 3 per cent) when deficit stood above the 3 per cent threshold and 0 otherwise for the years 1992-97. Results are similar.

[xvi] Alternatively we created subsamples for which we observe only positive values of our dependent variable Δdebt (113 observations) and for negative values (96 observations). The smaller sample of 102 observations, when we include our variables for Stability Culture, leaves us with two subsamples of 66 and 36 observations (for positive and negative values respectively). These are deemed to small to carry out the analysis and so our robustness checks are done without the

Stability Culture variables. The results with both subsamples (not shown but available upon request) indicate that the variable SGP has no significant impact across specifications whether the country is in a ‘good or bad’ fiscal period. Our main conclusion is reinforced by these robustness checks.

[xvii] We use the Stata command xtpcse with the option ‘pair-wise’ as our panel dataset is unbalanced.